Appl. No. 09/743,690 Amdt. dated July 26, 2004 Reply to Office Action of July 20, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1-65. (Cancelled)
- 66. (New) An isolated nucleic acid molecule comprising:
- (i) a first nucleic acid sequence that encodes a vacuole targeting polypeptide; and
- (ii) a second nucleic acid sequence, linked in operable combination to the first nucleic acid sequence, that encodes a biotin binding protein selected from the group consisting of:
 - (a) avidin;
 - (b) streptavidin;
 - (c) CORE streptavidin;
 - (d) synthetic CORE streptavidin; or
 - (e) SYNSAV.
- 67. (New) The nucleic acid molecule of claim 66, wherein the vacuole targeting polypeptide is a potato proteinase inhibitor signal polypeptide.
- 68. (New) The nucleic acid molecule of claim 67, wherein the vacuole targeting polypeptide is a potato proteinase inhibitor I signal polypeptide.
- 69. (New) The nucleic acid molecule of claim 67, wherein the vacuole targeting polypeptide is a potato proteinase inhibitor II signal polypeptide.
- 70. (New) The nucleic acid molecule of claim 66, wherein the biotin binding protein is avidin.

Appl. No. 09/743,690 Amdt. dated July 26, 2004 Reply to Office Action of July 20, 2004

- 71. (New) The nucleic acid molecule of claim 66, wherein the biotin binding protein is streptavidin.
- 72. (New) The nucleic acid molecule of claim 71, wherein streptavidin is a member selected from the group consisting of: Core streptavidin, synthetic Core streptavidin, and SYNSAV.
- 73. (New) The nucleic acid molecule of claim 71, wherein the streptavidin is encoded by the sequence set forth in SEQ ID NO:10.
- 74. (New) The nucleic acid molecule of claim 66, wherein the vacuole targeting polypeptide is a potato proteinase inhibitor I polypeptide and the biotin binding protein is avidin.
- 75. (New) The nucleic acid molecule of claim 66, wherein the vacuole targeting polypeptide is a potato proteinase inhibitor II signal polypeptide and the biotin binding protein is streptavidin.
- 76. (New) The nucleic acid molecule of claim 77, wherein the vacuole targeting sequence is an N-terminal targeting polypeptide.
- 77. (New) The nucleic acid molecule according to claim 66, wherein said nucleic acid molecule is a DNA molecule.
- 78. (New) A vector comprising the nucleic acid molecule according to claim 77.
 - 79. (New) A host cell transformed with the vector according to claim 78.
 - 80. (New) The host cell according to claim 79, wherein said cell is a plant cell.
- 81. (New) A method for producing the biotin-binding protein encoded by, said method comprising the steps of:

Appl. No. 09/743,690 Amdt. dated July 26, 2004 Reply to Office Action of July 20, 2004

- (a) culturing a host cell which has been transformed with a vector comprising the nucleic acid molecule according to claim 77; and
 - (b) recovering the expressed protein.
- 82. (New) A method for producing a pest resistant plant, said method comprising transforming the plant genome to include at least one nucleic acid molecule according to claim 77.
- 83. (New) A transgenic plant that comprising the nucleic acid molecule according to claim 77.
- 84. (New) A transgenic plant expressing pesticidally effective concentrations of the biotin-binding protein encoded by the nucleic acid molecule according to claim 66.
- 85. (New) A method for producing a biotin-binding protein, said method comprising extracting the protein from a plant transformed with the nucleic acid molecule according to claim 67.
- 86. (New) Seed that is the product of the plant according to claim 73, wherein the seed comprises the nucleic acid molecule according to claim 66.